and some flow-sheets take an entire page. A single (4-in.) column printing with a wide, almost empty margin to the left may bother the reader dedicated to economy of space.

A uniquely valuable review of biochemistry as the basis for endocrinology, together with a selective review of important precepts, is the introduction. Subsequent chapters feature a capsulated prospectus. The direct, almost conversational style is a refreshing change from the usual medical journalese. Only key references are included.

Reviews of hormone metabolism with "bad" as well as "good" effects are applauded. Nonetheless, tacit acceptance of an as yet admittedly unproved cause and effect sequence re: the "Pill," is regrettable. On the other hand, the "risks" of steroid contraceptives are minimized.

New (textbook) material includes transducer concepts, neurochemotransmitter factors, receptor substances and extragenital sources of hormones. Anovulation, hirsutism and dysfunctional bleeding are especially good chapters. Valuable step-wise procedures for diagnosis and treatment are provided but this is no "cook-book." Moreover, there is no implication of all-inclusive therapy.

Unfortunately, there are neither headings nor legends accompanying any of the fine illustrations. Hence the reader who is seeking specific information is impeded.

One can over-do simplification. A few clear, well-labeled photomicrographs of the endometrium would have been much more illustrative than the flashy, stylized drawings—despite color.

Five chapters dealing with aspects of infertility reveal a conservative but most successful clinical experience. Culdoscopy and laparoscopy are slighted but other surgical procedures are well covered.

Some will prefer to see the very descriptive material in the final chapter, "The Clinical Assay," integrated into earlier sections of the book.

There are definitely more "pros" than "cons" and the latter are added as friendly controversy in the hope that this fine text will be even better in the inevitable second edition. Students, house officers and generalists particularly should have this valuable book.

RALPH C. BENSON, MD

RALLIII C. BENGON, II.

ALIMENTARY TRACT ROENTGENOLOGY—Second Edition—Volumes 1 and 2—Edited by Alexander R. Margulis, MD, Professor and Chairman, Department of Radiology, University of California, San Francisco; and H. Joachim Burhenne, MD, Clinical Professor of Radiology, University of California, San Francisco, Chairman, Department of Radiology, Children's Hospital and Adult Medical Center, San Francisco. The C. V. Mosby Company, Publishers, 11830 Westline Industrial Drive, St. Louis (63141), 1973. 1690 pages total, in volumes 1 and 2; \$100.00.

The two-volume first edition of Alimentary Tract Roentgenology published in 1967 is accepted as authoritative. The updated second edition follows the format of the original. Fifty-eight authors, an increase of eleven, contribute sixty-four chapters, an increase of fifteen. The number of illustrations is doubled.

Two chapters by L. P. Johnson on the physiology of gastrointestinal hormones and the mechanisms of digestion and absorption broaden the scope of the book. Other new chapters are: Abdominal Trauma (J. J. McCort), Use of Iodinated Water Soluble Contrast Agents (A. R. Margulis), Complications of Drug Therapy (J. T. Ferrucci and S. B. Eaton), Motility Disorders of the Esophagus (W. J. Dodds and G. S. Harrell), Roent-

genology of Liver and Bile Ducts (A. R. Clementt), Endoscopic Camera Correlation (S. Yamagata and M. Ishikawa), Systemic Diseases Affecting the Alimentary Tract of Children (J. S. Dunbar and B. D. Fletcher) and Peroral Cholangiography and Pancreatography (J. A. Vennes).

Seven chapters are rewritten and expanded by new authors. These are: Nonneoplastic Diseases of the Stomach (W. B. Seaman), Neoplastic Diseases of the Stomach (W. Frick), Colonic Malignancy (F. E. Templeton), Infections and Infestations of the Gastrointestinal Tract (H. I. Goldberg and M. M. Reeder), Roentgenology of the Biliary Tract (H. J. Burhenne).

The section describing the biliary tract is one of the best and most extensively revised.

The index has been enlarged from 15 to 42 pages and is more detailed. Items are much easier to find.

The book is the most up-to-date and complete reference work available on alimentary tract roentgenology. It fully accomplishes the authors' goals, stated in the preface, to correct some omissions and to present a more logical sequence of chapters. It can be recommended with complete confidence to those desiring modern comprehensive accounts of subjects of radiological interest in the alimentary tract.

FREDERIC TEMPLETON, MD

POSTOPERATIVE DISORDERS OF THE GASTROINTESTINAL TRACT—Hastings K. Wright, MD, Chief of General Surgery, Yale-New Haven Hospital, Professor and Chairman, Department of Surgery, Yale University School of Medicine, New Haven; and M. David Tilson, MD, Instructor in Surgery, Yale University School of Medicine. Grune & Stratton, Inc., 111 Fifth Avenue, New York City (10003), 1973. 204 pages, \$14.50.

This is an excellent book that I am now reading through for the second time as it contains so much useful information. I believe it should be read by every surgeon, internist, medical student and physiologist.

FRED M. ANDERSON, MD

HUMAN RADIATION BIOLOGY—Kedar N. Prasad, PhD, Associate Professor of Radiology, Chief, Section of Radiation Biology, University of Colorado Medical Center, Denver. Medical Department, Harper & Row, Publishers, Inc., 2350 Virginia Avenue, Hagerstown, MD (21740), 1974. 524 pages, \$25.00.

The book is designed for use by radiology residents and students of radiobiology. Even though the author goes into considerable detail in certain areas, the book makes easy reading. The author has devoted a major portion of the book toward the clinical side of radiation effects and has outlined various topics in each chapter, thereby facilitating ease of its use in reference.

The author initially reviews basic cell biology and along with radiation physics the current theories of biological effects. The book bogs down briefly as the author covers cellular and molecular radiation biology in great detail. The majority of the text covers radiation effects on the various organ systems and the radiation syndromes. Also discussed is the radiation hazard to the human fetus and the concept of maximum permissible dose.

The author has cogently assembled and organized a great number of facts on a difficult subject. The text's clinical orientation should make this book attractive to clinicians and anyone working in radiobiology.

CARL CARLSON, MD